RYAN J. MARTON (223979)
ryan@martonribera.com
CAROLYN CHANG (217933)
carolyn@martonribera.com
HECTOR J. RIBERA (221511)
hector@martonribera.com
CHIEN-JU ALICE CHUANG (228556)
cjalice@martonribera.com
PHILLIP J. HAACK (262060)
phaack@martonribera.com
MARTON RIBERA SCHUMANN & CHANG LLP
548 Market Street, Suite 36117
San Francisco, CA 94104
Tel.: (415) 360-2511

Attorneys for Zoho Corporation and
Zoho Corporation Pvt., Ltd.

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

OAKLAND DIVISION

ZOHO CORPORATION Plaintiff, v. SENTIUS INTERNATIONAL, LLC Defendant.	Case No: 4:19-cv-00001-YGR **RESPONSIVE CLAIM CONSTRUCTION BRIEF OF ZOHO CORPORATION AND ZOHO CORPORATION PVT., LTD.** Hearing Date: March 18, 2020 Time: 9:30 am Courtroom: 1, 4th Floor
SENTIUS INTERNATIONAL, LLC Counterclaimant, v. ZOHO CORPORATION and ZOHO CORPORATION PVT., LTD. Counter-Defendants.	

1

TABLE OF CONTENTS

21

22

23

24

25

26

27

28

TABLE OF AUTHORITIES

I.   INTRODUCTION

It is beyond dispute that the patents have nothing to do with spellcheck, the accused technology. Spellcheck is not mentioned in either of the asserted patents. Because of this, Sentius is forced to conjure support for its constructions where there is none. Sentius therefore relies on sleight of hand citations to large portions of the specification that actually do not support its positions and expert testimony also divorced from the intrinsic record in an effort to give the impression of support. Sentius should not be permitted to do this, and its proposed constructions should be rejected.

II.   ARGUMENT

A.   Sentius Mischaracterizes the '633 Patent

Sentius incorrectly characterizes the '633 patent as an improvement to "visual editors." Opening Brief of Sentius (Dkt. 50) ("Sentius Op. Br.") at 1. Specifically, it contends that the '633 patent "improves the productivity of … word processing program[s]" such that the file size of the text is kept small. *Id*. But the patent says nothing about word processing programs, and it says nothing about modifying or improving on "visual editors." In fact, the patent disclosure reveals that visual editors are a relatively small component of the invention. The only thing the patent says about visual editors is that they are used to divide up the text of a source file. '633 patent at 5:15-19, 7:4-8 (explaining that the "visual editor" permits a user to divide an input document into parts in using "a point and click system using a pointing device, such as a mouse."). There is no explanation of what a visual editor is, and the patent does not describe any modification to a visual editor or any type of word processor.

Contrary to Sentius's characterization, the '633 patent describes and claims a very particular method of using "a novel indexing scheme" to link textual source material to external reference materials in order to support a language-learning program. '633 patent at 1:28-31; 2:1-3. Unlike the accused word processing software, which operates on documents as they are being edited, the '633 patent describes a system in which completed texts are received from a publisher and processed to associate external content with portions of the source material. The patent describes that the "actual indexing process is completed in several steps, including word cuts, linking, and compilation." '633 patent at 7:1-2. It begins when an electronic textual source material is received from a publisher and

stored in a database. *Id.* at 7:8-10; *see also id.* at claims 17, 62, 101, 146 (reciting "textual source material stored in an electronic database"). The text is then cut into pieces (i.e. words). *Id.* at 7:3-12. As noted above, this is the only part of the process involving the "visual editor." Next, the cut pieces are linked to external references. *Id.* at 7:13-21. The words are indexed by recording byte offsets, starting from the address representing the beginning of the source text in the database and ending at the beginning and end of each word. These locations are mapped to links to reference material. *Id.* at 7:33-36. The byte offsets and corresponding links are stored in a look-up table for later retrieval. *Id.* Finally, the output is compiled: the cut text is reassembled to create an image of the document for display to a user. *Id.* at 7:22-29.

As the file history makes clear, the offsets are recorded in byte values so that the system is not bound to any particular file structure. Since all files are ultimately a sequence of bytes, words can be indexed without regard to a particular document structure or format by using the addresses of byte offsets in a file instead of a document-specific measure. During prosecution,[1] the patentee emphasized this feature in order avoid rejection in light of a prior art patent on annotating electronic books, U.S. Patent No. 5,146,552 to Cassorla. Cassorla used the internal structure of a document to identify the relative positions of words, namely by locating a word within a section number, paragraph number within that section, and word number within the paragraph. For example, a word might be identified as the fourth word in the second paragraph found under the first topic heading under the first chapter heading. *See, e.g.*, Dkt. 52-8 (Haack Decl., Exh. G) ("Cassorla") at 6:31-41; *see also id.* at Fig. 2, 3. In response to the rejection, the patentee emphasized that the claimed invention used "pure byte offsets" to locate items within the text and amended the claims to require that the starting and ending points of words be recorded as "addresses," not merely "positions" in the document. Dkt. 52-3 (Haack Decl., Exh. B ('720 patent File History, May 23, 1996 Response to Office Action)) at 6-7, 2-5.

After the document is compiled and ready to view, a user may load the document in an "electronic viewer" and click on a word in the document. The screen coordinates of the pointer are determined, and the location of the click is converted into a byte offset from the beginning of the text

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[1] As discussed in Zoho's opening brief, these rejections and amendments were against U.S. Patent No. 5,822,720, of which the '633 patent is a reissue.

document. This offset is compared to the starting and ending addresses stored in the look-up table to find what word was clicked, thereby mapping a click on the screen to a particular location within the internal representation of the original text. *Id.* at 7:40-49; 6:49-61. "When the offset value falls between a component's start and end points, a match is made and the external references can be resolved," and "the external reference is retrieved and displayed to the user." *Id.* at 7:47-49; 6:53-62.

B.   Disputed Terms of the '633 Patent

1.   "beginning position address of [a] textual source material stored in an electronic database"[2]

Sentius Construction	Zoho Construction
"first character position of a textual source material"	No construction necessary or, in the alternative: "the address at which source material starts in an electronic database"

The parties agree that this term refers to the start or the beginning of the source material; the disputes center on 1) what is a "beginning position address" and 2) what the patent means by "stored in an electronic database." As explained in Zoho's Opening Brief, the "beginning position address" is the anchor point for identifying the locations of the cut pieces of text in the rest of the document, which are identified (in a look-up table) by the offset from that "beginning position address in an electronic database" to the "starting point address" and "ending point address" for each word.

Both Sentius and Zoho agree that "beginning position address" refers to the beginning of the "textual source material." The specification states that individual cut words "are indexed based upon the position offset from the beginning of the text." '633 Patent at 7:33-34. The claim language makes clear that "the beginning of the text" is the beginning of the textual source material expressed as the address at which the textual source material starts "in an electronic database."

Contrary to the claim language, Sentius's construction includes a relative location—the position of a character in the text—rather than a fixed one, i.e. a specific "address." Sentius's construction reads out the word "address" entirely. As explained in Zoho's Opening Brief, this is contrary to positions

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[2] Zoho's opening brief omitted the "…stored in an electronic database" portion of this term congruently with the Joint Claim Construction Statement, *see* Dkt. 49-1 at 6, but has no objection to including it as part of the construed term.

Zoho's Responsive Claim Construction Brief
Case No. 4:19-cv-00001

3

Sentius took during prosecution to avoid rejection in light of the Cassorla patent. Dkt. 52 (Zoho Op. Br.) at 6, 9-10. As the court recognized in Sentius's prior suit against Flyswat, "Sentius responded by amending the patent to replace 'location' with 'address.'" Dkt. 52-9 (Haack Decl., Exh. H ("*Flyswat Claim Construction Order*") at 35.

As described above, Cassorla used the relative position of a word within a document, calculated by its location in a given chapter, section and paragraph and the word number within that paragraph. The patentee argued that its invention was fundamentally different because it did not locate words based on the document structure. Instead, it "operates upon pure byte offsets that are unrelated to the data type, location, and format" of the document. Dkt. 52-4 (Haack Decl., Exh. C ('720 patent File History, January 16, 1996 Office Action Response) at 11. The examiner initially rejected this argument because the contemporaneous claim language used "broad terms such as 'position' and 'location' to refer to the offsets in the document." Dkt. 52-5 (Haack Decl., Exh. D ('720 patent File History, April 2, 1996 Final Rejection)) at 3. The examiner accordingly reasoned that "Cassorla's coordinates still read on the broad terms of the claim." *Id*. In response, the patentee emphasized that its invention did not use "the relative position within the document," because it was not "limited to a specific text format." Instead, it created "media independent, linked documents" by using the "address on the electronic database" and operating on pure byte offsets. May 23, 1996 Response to Office Action (Dkt. 52-3) at 6-7. To make this more clear in the claims, the patentee amended the claims to replace the "broad terms" to which the Examiner objected, such as "beginning position" and "starting location" with phrases such as "starting point address" and "beginning position address . . . stored in an electronic database." *Id.* at 2-5.

Zoho's construction captures this claim scope—made clear by the inclusion of the word "address"—by requiring that the invention locate words by starting from a fixed beginning address. Sentius told the Patent Office that its invention worked in a particular way in order to secure issuance of the patent, and that meaning should be adopted now. *See Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1381 (Fed. Cir. 2011) (finding district court's construction narrowing claims was in accord with the patentee's statements in the specification and during prosecution); *Phillips v. AWH*

1 *Corp.*, 415 F.3d 1303, 1317 (Fed. Cir. 2005) ("The purpose of consulting the prosecution history in

2 construing a claim is 'to exclude any interpretation that was disclaimed during prosecution.'").

3   Sentius's construction would impermissibly expand the scope of the claims to include any

4 "character position," thereby sweeping in the relative character positions it disclaimed during

5 prosecution. Further, not only is Sentius's position inconsistent with the file history, it is contrary to

6 basic claim construction law: different terms are presumed to have different meanings. *Helmsderfer*

7 *v. Bobrick Washroom Equipment, Inc.*, 527 F. 3d 1379, 1381-82 (Fed. Cir. 2008) ("different claim

8 terms are presumed to have different meanings"). Since the claim language itself recites both

9 "position" and "address," Sentius's proposal, which simply eliminates "address," cannot be correct.

10   Further, Sentius's incorporation of "character position" into the construction is not supported

11 by any part of the intrinsic record. The patent discusses the "position" of words in the discussion of

12 Figure 2 but does not describe those values as "character" positions. '633 patent at 6:62-64 ("…an

13 offset of 25 is located at the look-up table location having a start point of 20 and an end point of 27 and

14 is linked to text located at position 200."). In fact, the specification never uses the word "character" in

15 the context of describing the location of words in the text file or the beginning of source material.

16 Instead, the only uses of the word "character" reference using the invention to look up information

17 about characters found in ideographic languages, such as in the Japanese language-learning

18 embodiment. *See, e.g.*, '633 patent at Abstract ("in which a user highlights unknown words or

19 characters"); 3:1-3 ("The sheer number of characters in ideographic alphabets, such as Kanji, presents

20 unique challenges for specifying and identifying individual characters."); 4:9-10 ("reading the foreign

21 word or character, such as Kanji"); 4:19-21 ("the system saves significant amounts of time and effort

22 by eliminating the need for the user to look up Japanese characters"); 10:7-8 ("displays the word in a

23 pop-window for quick search of a single character"). Sentius should not be permitted to rewrite its

24 claims to change "address" to "character position."

25   Sentius's proposal is also incorrect because it reads out the entire phrase "stored in an electronic

26 database." Sentius contends that the "electronic database" is merely "a text file that is opened for

27 processing such as by a visual editor," but this interpretation is contrary to the specification. Sentius

28 Op. Br. at 10. The specification does not equate the text file and database. Figure 1, below, the object

1 of the cited description, confirms that each of these entities—the text file (10), the visual editor (19),

2 and the wordified database (20)—are distinct. Sentius criticizes Zoho for failing to modify the phrase

3 "starts in an electronic database," and then proposes to

4 fix this perceived flaw by writing the clause out of the

5 claim entirely.

6   Sentius's remaining criticisms of Zoho's

7 proposed construction are equally without merit. The

8 term "address" is not a highly technical term that

9 warrants departing from an ordinary meaning.

10 Further, given that the word "address" is completely

11 absent from the specification, the patentee has clearly
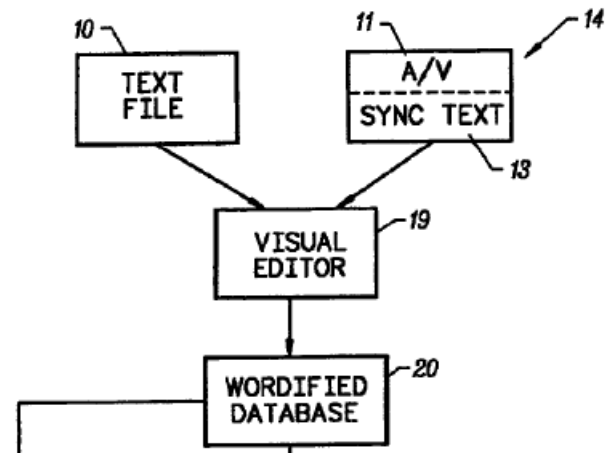
12 declined to give it a meaning particular to the '633 patent. Accordingly, the proper course is to let

13 "address" retain its ordinary and customary meaning. *Vitronics Corporation v. Conceptronic, Inc.*, 90

14 F.3d 1576, 1582 (Fed. Cir. 1996). Even Sentius's own extrinsic evidence in support its proposed

15 construction for "offset value" describes the term "offset" as "a value added to a base address to

16 produce a second address." Sentius Op. Br. at 12, citing Dkt. 50-3 at 58; *see also* Dkt. 50-3 at 71

17 ("offset (1) The distance from a starting point, either the start of a file or the start of a memory

18 address."). Sentius's own evidence confirms that Zoho's construction is correct.[3]

19   2.   **"starting point address" / "ending point address"**

Sentius Construction	Zoho Construction
starting character position ending character position	"an offset value from the beginning position address to the starting point" "an offset value from the beginning position address to the ending point"

24 As Zoho explained in its opening brief, the specification of the '633 patent describes and claims

25 a process in which an electronic book or other textual source material is first cut into words, those

26 words are linked to external material, and image of the text is compiled from the cut pieces. *See*

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27 [3] Sentius criticizes Zoho's construction for omitting the word "textual" from its construction. Zoho
28 has no objection to a construction that recites "the address at which *textual* source material starts in
   an electronic database."

1   *generally* '633 patent at 7:1-39. When the words are cut and linked, the "start and end points of the

2   cut text" are recorded along with the corresponding links in

3   a look-up table, a sample of which is shown in Figure 2. *Id.*

4   at 7:34-36. The specification is clear that the start and end

5   points recorded in the look-up table are offset values from

6   the beginning position address. The look-up table, item 202,

7   includes the start and end points for various words in the

8   documents, and a corresponding link to external reference

9   materials for each. So, as Figure 2 shows, a click on the

10 screen that is converted to an offset of 25 bytes from the

11 beginning of the text. *Id.* at 6:54-58. The corresponding row

12 in the look-up table is the third row down, with a start address of 20 and an end address of 27. In this

13 example, this is "TEXT, 200" which, when retrieved, is the text "Japanese economy." *Id.* at 6:58-67.
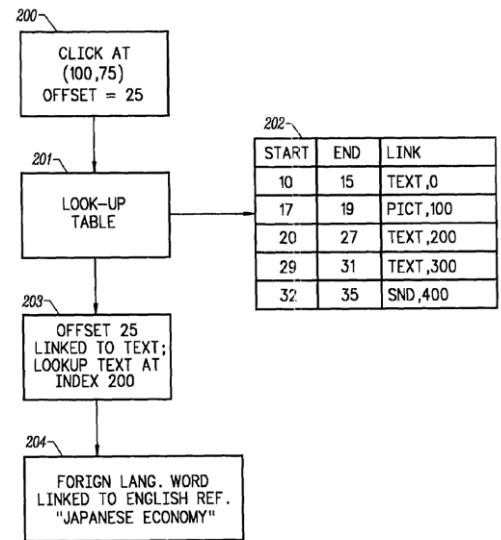
14   Zoho's construction captures this notion, because it requires a particular address in the

15 document.   In contrast, Sentius's construction is incorrect because, as with "beginning position

16 address," it improperly replaces an "address"—a particular location—with the broader term "position"

17 despite the unambiguous claim language and the patentee's representations during prosecution.

18   As with "beginning position address," Sentius does not provide any justification for this

19 departure. It argues that the specification teaches "that the starting and ending point addresses are the

20 starting and ending character positions of a word." Sentius Op. Br. at 11. The cited passage says no

21 such thing:

22   The click position is determined and used to calculate an offset value within
            the text (200). In the example shown in FIG. 2, the user clicks at a particular
23   location, e.g. horizontal and vertical coordinates 100 and 75, respectively, and
            an offset value of 25 is returned. The offset value is compared to the start and
24   end position indices stored in a look-up table (201, 202)…In the example of
            FIG. 2 an offset of 25 is located at the lookup table location having a start point
25   of 20 and an end point of 27 and is linked to text located at position 200.

26 '633 patent at 6:53-64. This passage tells the reader that a user clicks on a display, and that the click

27 is translated into an offset value in the text. It does not say the value is a "character position," or

28 otherwise describe the starting and ending points as character positions.   The specification states that

Zoho's Responsive Claim Construction Brief
Case No. 4:19-cv-00001   7

1   when the offset value is falls between the starting point and ending point values in the lookup table for

2   a given word, the user is understood to have selected that word. It follows that the starting point address

3   and ending point address are also offset values from the beginning position address, as required by

4   Zoho's construction. Only Zoho's construction stays true to the disclosures of the specification.

5   **3.   "offset value"**

Sentius Construction	Zoho Construction
"a value from a beginning point"	"distance in bytes from a beginning point"

8   The intrinsic record is clear; an "offset value" represents the distance in bytes from a beginning

9   point. In the context of the claims, that beginning point is the "beginning position address." Sentius

10 contends that the specification teaches a person of ordinary skill that an offset value is "a value from a

11 beginning point," relying on the agreed claim construction from Blackberry, filed contemporaneously

12 with its settlement.

13   Sentius's primary argument is that Zoho's construction is unduly limiting because the notion

14 of offset values being in bytes does not appear in the specification and because the patentee did not

15 clearly disclaim the broader scope of the claim. It is true that the limitation of offset values to bytes

16 does not appear in the specification. As discussed above, the specification says nothing at all about

17 what an offset value is, only what it is used for.

18   Even so, Sentius cannot escape the fact that it clearly and unambiguously described its invention

19 as "operat[ing] upon pure byte offsets" during prosecution. '720 patent File History, Jan. 12, 1996

20 Response to Office Action (Dkt. 52-4) at 10-11. Because it includes "express representations made by

21 the applicant regarding the scope of the claims," "the record before the Patent and Trademark Office

22 is often of critical significance in determining the meaning of the claims." *Vitronics*, 90 F. 3d at 1582

23 (citations omitted). "The purpose of consulting the prosecution history in construing a claim is to

24 'exclude any interpretation that was disclaimed during prosecution.'" *Chimie v. PPG Industries, Inc.*,

25 402 F. 3d 1371, 1384 (Fed. Cir. 2005), citing *ZMI Corp. v. Cardiac Resuscitator Corp.*, 844 F.2d 1576,

26 1580 (Fed. Cir. 1988).

27   As Zoho explained in its opening brief, Sentius argued that the invention was distinct from the

28 prior art because it "operates upon pure byte offsets" using the "address on the electronic database."

Zoho's Responsive Claim Construction Brief   8
Case No. 4:19-cv-00001

Jan. 12, 1996 Response to Office Action (Dkt. 52-4) at 10-11.   The patentee's statement was unambiguous; it concerned "the claimed invention." *Id.* at 11. Sentius emphasized that, unlike the prior art, the invention did not use "the relative position within the document," but used byte offsets to create "media independent, linked documents." May 23, 1996 Response to Office Action (Dkt. 5-23) at 6-7.

The patentee argued that the prior art, the Cassorla patent, "requires a paragraph and word offset in which a link is determined by a paragraph number and an offset within the paragraph," and thus "is limited to a specific text format." *Id.* That is, Cassorla used an offset value that was "a value from a beginning point." Sentius now wishes to broaden its claims, such that they are not "unrelated to" the "data type, location, and format" but *dependent on them*, by linking the offsets of words to any "position relative to a starting point."

Sentius argues that these statements about its own invention "could not be limiting the invention only to byte offsets because that would be contrary to the applicant's statement that the invention is not limited to 'a specific data format.'" Sentius Op. Br. at 13. This is backwards. A byte is a generic unit of digital information; every computer file format is made up of bytes. Using byte offsets rather than some measure of distance related to the document contents is exactly what makes the invention independent of data format or character position. A location in a file of any kind can be identified by an offset in bytes.

4.   **"image of the source material" / "image of the textual source material"/ "source material image"**

Sentius Construction	Zoho Construction
"an image displayed on a computer screen derived from the source file"	"an image displayed on a computer screen derived from the text created by reassembly of the cut pieces of source material"[4]

In all instances, the patent describes the image of the source material as something created from reassembly of the cut pieces of source material. The patent explains that after cutting the source text into pieces and linking those pieces to external material, the image is created through a compilation

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[4] As Sentius noted in its opening brief, prior to filing opening briefs, Zoho dropped its contention that this term requires that the displayed image be derived from the linking process, as the specification teaches that it is part of the following "compilation" step.

1   process wherein the cut pieces of source material are reassembled to create an image of the source

2   material. '633 patent at 7:14-15 ("The linking process takes the text after word cut process and it links

3   it to external references."); *id.* at 7:23-25 ("After linking, the text and references are compiled. During

4   compilation, the cut text is reassembled to create an image of the text that the end user sees."). This is

5   not a description of one of many embodiments; the only discussion of the "image" describes it as

6   created from reassembly of the cut pieces of source material. Zoho's construction captures this notion

7   and is true to the specification. "It is axiomatic that … [c]laim language must always be read in view

8   of the written description." *Retractable Techs., Inc. v. Becton, Dickinson & Co.*, 653 F.3d 1296, 1305

9   (Fed. Cir. 2011). "Usually, [the specification] is dispositive; it is the single best guide to the meaning

10   of a disputed term." *Vitronics*, 90 F. 3d at 1582.

11   By contrast, Sentius's proposed construction merely provides that the image is "derived from

12   the source file." This is too broad, inconsistent with specification, inconsistent with prior constructions

13   from the *Flyswat* case, and renders the claims indefinite. As noted above, in all instances, the patent

14   describes the image as something created from reassembly of the cut pieces of source material. The

15   patent never mentions a "source file" and never describes the image as being derived in some general

16   sense from the source material or source file. Notably, none of the claims refer to a "source file."

17   Therefore, by including reference to "the source file" in the construction, Sentius proposes adding a

18   new term into claim that lacks antecedent basis and would render the claim ambiguous and indefinite

19   ambiguously indefinite: would "source file" mean the same thing as the "source material?" If not,

20   how is it different? *See Halliburton Energy Services, Inc. v. MI LLC*, 514 F. 3d 1244, 1249 (Fed. Cir.

21   2008). Sentius's position is also inconsistent with how the term was construed in the *Flyswat* case.

22   There, after Sentius argued that "source material image" is the "binary embodiment of the source

23   material; it is the source material once it has been entered into the system…," the Court construed the

24   term as "an image displayed on a computer screen derived from the text (and/or other material) created

25   by means of the: (1) linking, and (2) reassembly of the cut pieces (from the 'source material')." *Sentius*

26   *v. Flyswat* Claim Construction Order (Dkt. 52-9) at 20-25; *Sentius v. Flyswat*, Opening Claim

27   Construction Brief of Sentius (Dkt. 52-15) at 8-9. In reaching this construction, the *Flyswat* court

28   recognized that "source material image" was not used in the specification and that the "only" use of

1   image in the specification is "in the description of the 'compilation' step." *Sentius v. Flyswat* Claim

2   Construction Order (Dkt. 52-9) at 22. As such, requiring the source material image to be something

3   that is created by reassembly of text after cutting and linking was the correct construction in *Flyswat*,

4   and it is also correct here. In sum, Zoho's proposed construction is consistent with the teachings of

5   specification and prior constructions of a related patent. Sentius's proposed construction is neither.

5.   "look-up table"

Sentius Construction	Zoho Construction
A data structure that contains values for searching or retrieving.	"an array or matrix of data that contains values for searching"

9   As explained in its opening brief, Zoho's construction is based on the specification, the well-

10   known and understood meaning of "look-up table" in computer science, and from a prior litigation in

11   which Sentius agreed that look-up table should be construed as "an array or matrix of data that contains

12   values for searching." *Sentius v. Blackberry*, Joint Claim Construction Chart (Dkt. 52-10) at 15.

13   Sentius has provided no argument as to why it should be able now deviate from its prior

14   position. Moreover, Sentius's proposed construction is overbroad in that it reads the "table" out of

15   "look-up table" and substitutes in any "data structure." Sentius contends that the issue with Zoho's

16   construction is that a jury might not know what an "array or matrix" is, but these are not difficult to

17   understand. Sentius Op. Br. at 15. The patent even shows a sample look-up table in Figure 2. In

18   addition, the extrinsic evidence submitted by Sentius supports Zoho's definition. *See* Dkt. 50-3 at 10-

19   11 ("A lookup table, similar to a tax table, consists of rows and columns of data."); Dkt. 50-3 at 70

20   ("lookup A data search performed within a predefined table of values (array, matrix, etc.) . . . "); *see*

21   *also* Dkt. 52-11 at 527 ("An array or matrix of data that contains values that are searched."); Dkt. 52-

22   12 (look-up table: "A stored matrix of data for reference purpose."). Sentius's proposal contrary to the

23   intrinsic and extrinsic evidence. Accordingly, the Court should adopt Zoho's construction, and reject

24   Sentius's re-drafting of the claims from "look-up table" to "look-up data structure."

6.   **"means for compiling the source material image from at least the plurality of discrete pieces"**

Sentius Construction	Zoho Construction
Function (Agreed): "compiling the source material image from at least the plurality of discrete pieces"	Function (agreed): "compiling the source material image from at least the plurality of discrete pieces"
Structure: a computer having a visual editor and user interface programmed to perform the recited function, and equivalents thereof	Structure: None/indefinite

To determine "whether a claim is indefinite," courts "do not look to the knowledge of one skilled in the art apart from and unconnected to the disclosure of the patent." *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 519 (Fed. Cir. 2012) (quotations omitted). Instead, they must "look at the *disclosure* of the patent and determine if one of skill in the art would have understood that *disclosure* to encompass" sufficient structure. *Id.* (citations omitted). If no algorithm is disclosed, the claim is invalid, regardless of how simple it would have been for a person of ordinary skill to implement the function. *See EON Corp. v. AT&T Mobility LLC*, 785 F.3d 616, 623-24 (Fed. Cir. 2015).

Sentius claims that the disclosure of a "visual editor" is sufficient structure to describe the "means for compiling." It is not. To qualify as "corresponding structure" for a means-plus-function term, the intrinsic evidence must clearly link or associate that structure to the function recited in the claim. *B. Braun Med., Inc. v. Abbot Labs.*, 124 F.3d 1419, 1424 (Fed. Cir. 1997). "Even if the specification discloses a corresponding structure, the disclosure must be adequate; the patent's specification must provide an adequate disclosure showing what is meant by that [claim] language." *Noah Systems, Inc. v. Intuit Inc.*, 675 F. 3d 1302, 1311 (Fed. Cir. 2012) (internal quotations omitted).

Here, Sentius can show neither a link nor an adequate disclosure. The "visual editor" is not in any way linked with the compilation step. The specification only says that it is involved in the "word cutting process" and that a "text file 10 and/or a multimedia source 14 . . . is edited during construction of a linked text database by a visual editor." '633 patent at 7:4-6, 5:15-19. Sentius contends that "the visual editor conventionally uses a grammar parser to build an index that locates each word in the text file," but the specification says that this is performed by the database, not the visual editor. Sentius Op. Br. at 17; '633 patent at 7:15-18 ("the database 20 sources a grammar parser 23 and a link engine

1   22 that builds an index 21 which, in turn, locates each textual and audio/video reference in the source

2   material").

3   Even if the visual editor was linked to the compiling step, it is not sufficient structure. Sentius

4   argues that this is conventional functionality, performed by conventional "visual editor" software

5   modules, and that one of ordinary skill in the art would therefore know how to perform the function.

6   This is contrary to the law. The Federal Circuit requires "that specification disclose an algorithm for

7   performing the claimed function," and Sentius cannot identify any such disclosure. *Noah Systems*, 675

8   F.3d at 1302 (quotations omitted). One of ordinary skill in the art cannot fill-in the gaps in the patent

9   with his or her own knowledge. Rather, "the *disclosure* must identify the method for performing the

10   function, whether or not a skilled artisan might otherwise be able to glean such a method from other

11   sources or from his own understanding." *Noah Systems*, 675 F.3d at 1302 at 1317.

12   The only exception to the general rule requiring disclosure of an algorithm the so-called *Katz*

13   exception," set out in *In re Katz Interactive Call Processing Patent Litigation*, 639 F.3d 1303 (Fed.

14   Cir. 2011). This permits a patentee to claim a function without a corresponding algorithm where the

15   function "can be achieved by any general purpose computer without special programming." *Id.* at

16   1316. This applies where the function is "'coextensive' with a microprocessor itself." *EON Corp.*, 785

17   F.3d at 621-22.

18   Sentius does not contend that the "visual editor" is present in all general-purpose computers, or

19   that it would take no programming of a processor to permit it to perform the compilation function.

20   Rather, it contends that "conventional visual editors of the day" could perform the claimed function.

21   Sentius Op. Br. at 16-17. Even if this was linked to the function in the specification, it is still legally

22   insufficient. The *Katz* exception does not apply and Sentius's failure to disclose or identify an

23   algorithm renders this term indefinite.

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7.   **"means for converting the display address of the selected discrete portion to an offset value from the beginning position address"**

Sentius Construction	Zoho Construction
<u>Function (agreed)</u>: converting the display address of the selected discrete portion to an offset value from the beginning position address	<u>Function (agreed)</u>: "converting the display address of the selected discrete portion to an offset value from the beginning position address"
<u>Structure</u>: a computer having a visual editor and an electronic viewer module programmed to use an index to determine the offset value from the beginning position address of the selected horizontal and vertical coordinates, and equivalents thereof	<u>Structure</u>: None/indefinite

As with the "means for compiling" term, Sentius has identified no structure that links the means for converting to its purported structure and provides an algorithm for doing so. Sentius claims that the '633 patent describes as conventional the conversion of a screen location to offset within a document. It does not. All the patent describes is that "[t]he click position is determined and used to calculate an offset value within the text." '633 patent at 6:48-53; 7:40-44 ("When the user 'clicks' within the text image, the location of the pointer is determined. The location is converted into a position offset from the beginning of the text….").

Sentius contends that these disclosures recite sufficient structure in the form of a visual editor and user interface, "as this function is a common and known function of a user interface used by a visual editor." Sentius Op. Br. at 19. As with the prior term, this is contrary to the law. Nothing links the visual editor to these functions. Sentius points to the disclosure of an electronic viewer that is part of user interface 32. As Figure 1 shows, the electronic viewer itself is not part of the visual editor 19.
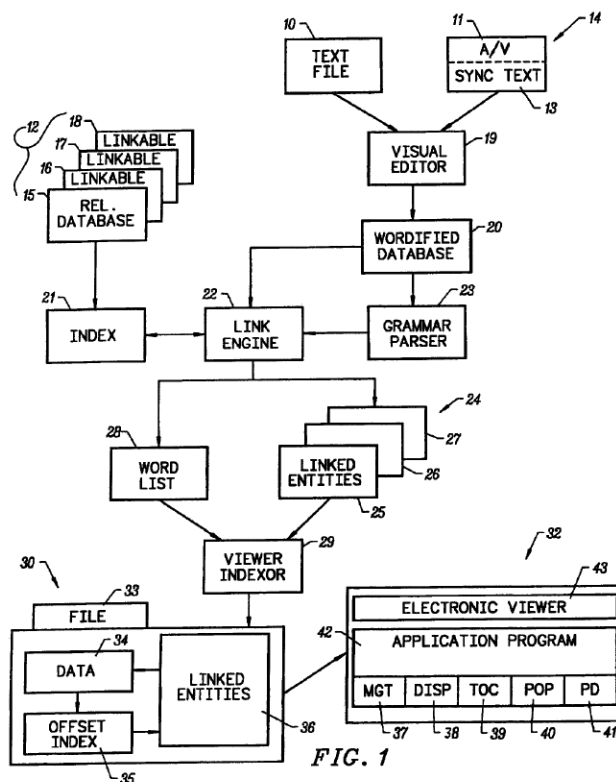
FIG. 1

Although the specification does describe the electronic viewer as the module that handles user selections of a word, it says nothing about it performing the claimed conversion function. *See* '633 patent at 5:4-6 ("The first module is an electronic viewer that gives the user access to reference information on each word in the electronic text at a word by word level."). The specification describes the user interface and electronic viewer as follows:

> A user interface 32 to the system includes an electronic viewer 43 that runs along with the system application program 42 and provides the following functional elements: index management 37, user display 38, a table of contents 39, a pop-up display 40, and a personal dictionary 41. The electronic viewer module is used to view and read the electronic books provided with the language learning system.

'633 patent at 5:34-41. These disclosures say nothing about the conversion feature, and Sentius has not identified any others. And Sentius cannot rely on the alleged fact that such conversion was "conventional" to escape the requirement that it disclose how to perform the function.

Where, as here, the purported structure is a general-purpose computer, "requiring disclosure of an algorithm properly defines the scope of the claim and prevents pure functional claiming." *Alfred E. Mann Foundation for Scientific Research v. Cochlear Corp.*, 841 F.3d 1334, 1342 (Fed. Cir. 2016) (quotations omitted). That is, the specification must disclose a "step-by-step procedure for accomplishing a given result," which "may be expressed in any understandable terms including as a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure." *Id.* (quotations omitted). Even if this function were conventional, as Sentius claims, the fact that "a person of ordinary skill in the art would know of potential . . . functions to implement, . . . this does not create structure in the patent where there was none to begin with." *Id.*

Neither a "visual editor" nor an "electronic viewer module" is an algorithm. These are merely "black box" disclosures that are not a description of structure. *Blackboard, Inc. v. Desire2Learn, Inc.*, 574 F. 3d 1371, 1383 (Fed. Cir. 2009); *see also Augme Techs., Inc. v. Yahoo! Inc.*, 755 F.3d 1326, 1337-38 (Fed. Cir. 2014) ("[s]imply disclosing a black box that performs the recited function is not a sufficient explanation of the algorithm required to render the means-plus-function term definite").

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C.   Sentius Ignores the Core Purpose of the '985 Patent

Like the '633 patent, the '985 patent describes a method for annotating documents with links to external content. Unlike the '633 patent, it focuses on leveraging the value of expert-created databases by syndicating portions of the database to remote computers as "data objects", so that those computers can parse local documents and link terms in them to external content. The claimed data objects are "needed to create links and the rules for linking to database" and are used "to execute linking rules." '985 patent at 2:14-16; Abstract. By syndicating data objects that reflect a portion of the centralized database to remote processors at publisher sites, the '985 patent attempts to "create a scalable system for managing the process of creating richly linked associations between terms and related content," and "enable the costs of production to be managed" for "large-scale link databases." '985 patent at 1:64-2:3. In order to do this, a content publisher installs an "automated tagging engine" or "RichLink Processor" in its own network. *Id.* at 2:44-47. This software "automatically downloads, from the central database, the data structures necessary to perform high-speed tagging of the text and to execute the tagging rules without requiring a connection to the database at the time of tagging." *Id.* at 2:47-52.

D.   Disputed Terms of the '985 Patent

1.   "data objects associated with a term database" / "data objects associated with the term database" / "data objects associated with a database"

Sentius Construction	Zoho Construction
"computer readable data structures that include data from [a/the] [term] database"	"computer-readable data structures that include data from [a/the] [term] database and rules for processing the one or more documents and linking content with identified terms"

Zoho's proposed construction of "data objects…" is drawn directly from the definition and descriptions in the specification. The claimed data objects are the data syndicated from the central database that is "needed to create links and the rules for linking to database" and is used "to execute linking rules." '985 patent at 2:14-16; Abstract.

Sentius's criticizes Zoho's construction as unduly importing limitations form the specification because, it says, the term "'rules' only appears in connection with the parsing element recited in the

1   claims." Sentius Op. Br. at 20. Sentius's contention that only a preferred embodiment describes data

2   objects including "rules for linking content to terms" is incorrect. The Summary of the Invention—not

3   just the preferred embodiment—states that the rules used to process a document come from "the central

4   database":

> The RichLink Processor automatically downloads, from the central database, the data structures necessary to perform high-speed tagging of the text and to execute the tagging rules without requiring a connection to the database at the time of tagging, although it remains possible to do so. The RichLink Processor performs routine synchronization of its data structures with the database to insure that changes to content within the database, tagging rules, or presentation rules are reflected locally.

9   '985 patent at 2:46-56. Further, the only database data described by the claims are the data objects.

10 The Abstract of the invention confirms this understanding, stating that the "processing engine uses

11 these data objects to execute linking rules." *Id.* at Abstract. Zoho's construction simply includes these

12 definitions—that data objects are used for processing and linking.

13   Sentius also criticizes Zoho's construction because the specification does not require every data

14 object to include rules for both processing and linking. Zoho agrees. As Zoho discussed in its opening

15 brief, the specification describes two kinds of data object, lexicon objects and template objects, each

16 of which serves a different purpose. A lexicon object contains "data required to match terms and create

17 tags such as a representation of the terms in the database," and "other Term Database content for which

18 fast access is required, such as annotation content." '985 patent at 9:19-35. "The Template Object

19 provides a local representation of the Template that contains the rules for processing and linking a file."

20 '985 patent at 9:37-39. Zoho's construction does not require that every data object necessarily include

21 both kinds of data, but the collective "one or more data objects" recited in the claims must include this

22 content. Zoho's construction is correct and should be adopted.

2.   "parsing one or more documents to identify at least one term based on at least one rule" / "parsing one or more source documents to identify at least one term based on one or more predetermined rules"

Sentius Construction	Zoho Construction
"breaking one or more documents into segments to identify at least one term based on at least one rule"	"breaking one or more documents into segments and creating an index of those segments and using at least one rule to identify at least one term in the index"

Sentius Construction	Zoho Construction
"breaking one or more source documents into segments to identify at least one term based on at least one predetermined rule"	"breaking one or more source documents into segments and creating an index of those segments and using at least one predetermined rule to identify at least one term in the index"

Sentius argues that "[t]he '985 Patent refers to parsing in its conventional sense," but the '985 patent never describes the parsing process as conventional. Parsing is only mentioned three times in the specification. The Summary of the Invention provides a high-level description that links parsing to the application of rules: "[t]erm identification may be accomplished by crawling and parsing the corpus to select terms through application of rules." '985 patent at 2:22-26.

The second mention of "parsing" is in the detailed description of the "Term Finder," which describes the "parsing" process as including three parts: breaking documents into words or phrases, creating an index of those segments, and using the index to apply rules to identify a term. *See id.* at 6:50-66. The final mention provides no additional detail. *See id.* at 9:1-4 ("…several operations can be optionally run on the text. The text may be parsed, the document categorized, and page-level meta data tags added to the page.").

The parties agree that "parsing" includes the first and third parts of the described process (segmenting a document and applying rules). Sentius balks at the notion that parsing includes "creating an index." But the same portion of the specification that Sentius relies on to support its construction teaches that parsing is performed using "natural language processing to tokenize the text into significant objects such as words and phrases *until a full index of all words and phrases on the site is created*." *See* Sentius Op. Br. at 22, citing '985 patent at 6:58-60 (emphasis added). The specification explains that rules are applied to the index in order to identify a term, which both parties agree is part of the "parsing" step. '985 patent at 6:61-62 ("From this full index, terms of interest are chosen using a set of rules."). Sentius would apparently prefer to follow the specification when it comes to what parsing is (breaking down a document for some purpose), and what it accomplishes (identifying a term), but exclude how it is done, i.e. it would prefer to ignore the patent disclosure and keep the claims fully functional. Zoho's construction is the correct one.

3.   "lexicon object"

Sentius Construction	Zoho Construction
representation of content used to match terms with content or to create tags to assist in matching terms to content	computer-readable data structure that provides a local representation of the content of the term database and data required to match terms and create tags

Much like the parties' dispute over "data objects" generally, the dispute over "lexicon object" centers on whether Sentius can broaden its claims beyond what it described in the specification. Sentius cannot dispute that "lexicon object" is a term coined by the specification, not a general term known in the art. As such, the Court should follow the patent's definition. *Vitronics*, 90 F. 3d at 1582 ("The specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication."). As Zoho's construction requires, the specification describes the lexicon object as including both content used to match terms and create tags:

> Lexicon Object 920
>
> The Lexicon Object provides a local representation of the content of the Term Database for use by the RichLink Processor 910 so a direct connection to the Term Database is not required and the Term Database may be on a remote server from the RichLink Processor. The Lexicon Object contains data required to match terms and create tags such as a representation of the terms in the database optimized for fast matching by the RichLink Processor, the TermID from the Term Database, the DictionaryID from the Term Database, and other Term Database content for which fast access is required, such as annotation content.

'985 patent at 9:18-29. Zoho's proposal accurately follows this definition. The patent never describes the lexicon object as optionally including either data to match terms or to create tags; it is described as including both. *See id.* at 8:51-54 ("The RichLink Processor interacts with the …Lexicon Object 920 to identify what terms should be tagged in the Source text."); *id.* at 9:5-8 ("Matches between terms on the page and terms occurring in the Lexicon Object for dictionaries specified by the template used with this page are identified. A tag is created around matched terms if meta data or other criteria are met.").

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                                                   MARTON RIBERA SCHUMANN & CHANG LLP
3
                                                    By:_____/s/ *Phillip J. Haack*_____
4   Phillip J. Haack
                                                   PHILLIP J. HAACK (SBN 262060)
5   phaack@martonribera.com
                                                   MARTON RIBERA SCHUMANN & CHANG LLP
6   548 Market Street, Suite 36117
                                                   San Francisco, CA 94104
7   Telephone: (415) 360-2517

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